FLEXIBLE STATOR BARS

ABSTRACT

[0029] A flexible stator bar generally includes a stranded conductor having a rectangular shaped cross sectional profile, wherein the stranded conductor comprises a plurality of wires having a gauge dimension effective to impart flexibility; and a thermoplastic elastomeric insulating material disposed about the stranded conductor. Also disclosed herein are processes for fabricating the flexible stator bar, which generally comprises depositing a thermoplastic elastomeric insulating material onto the flexible stranded conductor, which can be flexibly oriented into a desired position, thereby improving dimensional control relative to Roebel-type stator bars. The insulated flexible stranded conductor may then be coated with a B-stage epoxy or the like and cured to form the final shape after assembly within the desired electrical machine application.